METALLICEX

Metallic Pigment for Epoxy Coatings



The color samples above are digital representations only of actual test samples. Due to variations in concrete composition, age, surface conditions, surface preparation, product mixing, and application techniques, exact colors will vary. All color samples shown above were applied to a concrete tile sample, previously primed with black tinted epoxy. Test prior to use.

Description: Metallic FX is a high build, highly durable, metallic epoxy flooring system designed for interior residential, commercial, retail or restaurant concrete floors. The Metallic FX system offers 20 different colors which can be used individually or in any combination of multiple colors. The excellent flow and leveling properties of 250 HP Cyclo Epoxy when mixed with our Metallic FX pigment results in an beautiful, one of a kind marble like finish. Every job is unique!

Our 250 HP Cyclo Epoxy is a low viscosity 100% solids cycloaliphatic epoxy that is easy to apply and provides an extremely hard, high gloss, durable coating in clear, pigmented, or metallic finishes. Refer to 250 HP Cyclo Epoxy Technical Data Sheet and SDS prior to use!

Unlike most concrete coatings systems, there are no set rules on the method of application due to the multiple possibilities in color combinations and finishing techniques that can be used to manipulate the visual effect of the **Metallic FX** pigments.

Common Application Procedures

Surface Preparation: If cracks are present, clean out cracks and if necessary rout out the cracks with an electric hammer drill and chisel bit, vacuum out loose debris and fill cracks with Rapid Set 100 crack filler (refer to the Rapid Set 100 Technical Data Sheet application instructions).

Mechanically grind the floor with a diamond grinder using 30 grit or coarser diamonds or shotblast the surface to achieve a CSP-3 to CSP-5 profile (ICRI guidelines, www.icri.org) to ensure adequate adhesion of the **Metallic FX** system. Sweep and vacuum entire floor and follow with an acetone wipe with a dust mop to pick up any remaining dust.

Prime Coat: For a 3 Gallon kit, depending on the desired colors, mix either a 16 oz EpoPack-HP color pack for a solid color prime coat or a 32 oz Metallic FX pigment pack to the Part A 250 HP Cyclo Epoxy and slowly stir with a drill mixer 1 – 2 minutes or until color is thoroughly dispersed. Then add Part B 250 HP Cyclo Epoxy and stir slowly 2 full minutes or until the color is thoroughly mixed scraping the sides and bottom of the mixing vessel. Apply the mixed material using a flat or notched squeegee at 100 – 150 square foot per gallon and back roll using a shedless 3/8" nap roller cover. A common prime coat color used is Black EpoPack-HP. It hides discoloration of the concrete and crack patching material and also works excellent as a background color to the top coat Metallic FX pigment, however, any color of EpoPack-HP or Metallic FX pigment can be used for the prime coat to achieve the desired color effect. Suggested application temperature: surface, air and material temperature range for 250 HP Cyclo Epoxy 50° - 85° F. Pour and apply mixed material on the floor immediately after mixing. Leaving in mix container will shorten pot life time.

Prime Coat Notes: It is critical to completely seal off the floor during the prime coat to eliminate outgassing from the concrete pores. If not completely sealed off during the prime coat application, late outgassing from the pores of the concrete can create late bubbles in the thicker applied Metallic FX coat. As the prime coat is applied back rolling is a vital step for a successful job! Also, an excellent tool to have on hand during the prime coat is a spiked or porcupine roller with an extension handle to be able to reach back out on the floor to pop a late bubble from outgassing. If the concrete is extremely porous or soft and if better penetration is needed to seal off the floor, adding 1-2 ounces of Xylene per gallon to the 250 HP Cyclo Epoxy will help reduce or eliminate outgassing from the concrete floor. Applying a coat of our low solids, low viscosity water based epoxy, 1040 Bond Koat (refer to 1040 Bond Koat Technical Data Sheet) prior to the 250 HP Cyclo Epoxy will also help reduce outgassing and improve adhesion to the concrete.

Metallic FX Coat: For a 3 Gallon kit mix a 32 oz bottle (add more or less to achieve desired opacity) of Metallic FX color in the Part A 250 HP Cyclo Epoxy and mix for 1 – 2 minutes with a drill mixer at slow speed. Add Part B 250 HP Cyclo Epoxy to the pigmented Part A and stir gently but continuously with a drill mixer for 2 full minutes scraping the sides and bottom of the mixing vessel. Apply mixed material with a flat or notched squeegee or shedless 3/8" roller cover at a rate of approximately 75 – 100 square foot per gallon or at the desired mils rate of thickness. Various visual effects can be obtained by different finishing techniques. Techniques such as swirling your roller in a circular motion, hand troweling in short strokes, using multiple colors mixed separately and poured out in ribbon like streams then rolled, squeegeed or troweled, misting Denatured Alcohol, MEK or Acetone on the surface or even using a leaf blower are some of the techniques that can be used to create custom finishes.

Optional Top Coats: Apply a clear coat of 250 HP Cyclo Epoxy for low odor with an additional 2-3 coats of Cherry Surf-Wax (refer to Cherry Surf-Wax Technical Data Sheet) is common for high foot traffic areas. For faster return to service, use PolyKoat GL 70 or PolyKoat GL 80 (refer to PolyKoat GL 70 or PolyKoat GL 80 Technical Data Sheet) with Cherry Surf-Wax. For vehicular traffic areas needing chemical or gas resistance such as garages, a top coat of our 60% Aliphatic Chemical Resistant Urethane (refer to 60% Aliphatic Urethane Technical Data Sheet) or PolyKoat GL 70 or PolyKoat GL 80 are excellent options.

250 HP Cyclo Epoxy Properties

Mix Ratio	2:1 Part A/B Volume	Flexibility (1/8" Mandrel) ASTM D-790			pass
Pot Life @ 72 F	12 – 15 minutes	Elongation % ASTM D-638			10 - 12
Dry Time – Set to Touch (50% R.H. @ 72 F)	6 – 8 hours	Tensile Strength, psi ASTM D-638			6200
Dry Time – Recoat (50% R.H. @ 72 F)	10 – 16 hours	Gloss 60°			90 - 95
Dry Time-Light Traffic (50% R.H. @ 72 F)	16 – 18 hours	Chemical Resistance (24 hour exposure)			
Cure Time to reach full properties (50% R.H. @ 72 F)	up to 7 days	Vegetable Oil	No Effect	Gasoline	No Effect
Solids % by Weight	100	Mustard	No Effect	Motor Oil	No Effect
voc	none	Urine	No Effect	Transmission Fluid	No Effect
Hardness, Shore D, ASTM D-2240	80 - 82	10% Sulfuric Acid	No Effect	Brake Fluid	Softened
Compressive Strength @ yield, psi, ASTM D-695	11,200	Xylene Softened	, Recovered	MEK	Destroyed